LISTING OF THE CLAIMS

In the Claims: Claims 1-34 are currently pending in the application. Claims 1, 2, 3, 4, 7, 8, 10, 11, 12, 14, 15, 16, 17, 20, 23, 26, and 30 have been amended. Claims 5, 6, 13, and 19 have been canceled without prejudice to or disclaimer of the subject matter of these claims. Underlining indicates additions to a claim and strikeouts indicate deletions from a claim. With entry of these amendments, claims 1-4, 7-12, 14-18, and 20-34 will be pending in this application.

1. (currently amended) A method for compression, comprising:

forming a third ~~halftone~~ color plane, indicating whether a first colorant and a second colorant will be placed on ones of a plurality of pixels, a fourth ~~halftone~~ color plane, indicating whether neither of the first colorant or the second colorant will be placed on the ones of the plurality of pixels, and a fifth ~~halftone~~ color plane, indicating whether one of the first colorant and the second colorant will be placed on the ones of the plurality of pixels, from a first ~~halftone~~ color plane and a second ~~halftone~~ color plane; and

performing ~~a~~ the compression on the third ~~halftone~~ color plane, the fourth ~~halftone~~ color plane, and the fifth ~~halftone~~ color plane.

2. (currently amended) The method as recited in claim 1, wherein:

forming includes determining if a first halftone data value, included within the first ~~halftone~~ color plane, indicates placement of ~~a~~ the first colorant ~~onto~~ on one of ~~a~~ the plurality of pixels ~~pixel~~;

determining if a second halftone data value, included within the second ~~halftone~~ color plane, indicates placement of ~~a~~ the second colorant ~~onto~~ on the one of the plurality of pixels ~~pixel~~;

setting an element in a first array, corresponding to the third ~~halftone~~ color plane, to a first value ~~for~~ where placement of the first colorant and the second colorant ~~onto~~ on the one of the plurality of pixels will be done ~~pixel~~;

setting the element in the first array to a second value ~~for~~ where placement of fewer than the first colorant and the second colorant ~~onto~~ on the ~~pixel~~ one of the plurality of pixels will be done;

setting an element in a second array, corresponding to the fourth halftone color plane, to the first value ~~for~~ where placement of neither the first colorant or the second colorant ~~onto~~ on ~~the pixel~~ the one of the plurality of pixels will be done ;

setting the element in the second array to the second value ~~for~~ where placement of either the first colorant or the second colorant ~~onto~~ on the ~~pixel~~ one of the plurality of pixels will be done;

setting an element in a third array, corresponding to the fifth halftone color plane, to the first value ~~for~~ where placement of ~~only~~ the first colorant ~~onto~~ on the ~~pixel~~ one of the plurality of pixels without placement of the second colorant on the one of the plurality of pixels will be done; and

setting the element in the third array to the second value ~~for~~ where placement of ~~only~~ the second colorant ~~onto~~ on the ~~pixel~~ one of the plurality of pixels without placement of the first colorant on the one of the plurality of pixels will be done.

3. (currently amended) The method as recited in claim 2, wherein:

the first ~~halftone~~ color plane includes a cyan ~~halftone~~ color plane; and

the second ~~halftone~~ color plane includes a magenta halftone color plane.

4. (currently amended) The method as recited in claim 3, wherein:

the ~~third halftone color plane includes pixels for placement of~~ first colorant includes cyan colorant and the second colorant includes magenta colorant.

5. canceled

6. canceled

7. (currently amended) The method as recited in claim 6 1, wherein:

the performing the compression includes performing a run length encoding.

8. (currently amended) The method as recited in claim ~~7~~ 3, further comprising:

performing a halftone operation ~~upon a~~ to generate the cyan color plane and ~~a~~ to generate the magenta color plane ~~to generate, respectively, the cyan halftone color plane and the magenta halftone color plane~~.

9. (original) The method as recited in claim 8, wherein:

the halftone operation includes a plane dependent matrix based halftoning operation.

10. (currently amended) The method as recited in claim ~~6~~ 1, wherein:

the performing the compression includes performing JBIG encoding.

11. (currently amended) An apparatus to perform a compression, comprising:

a processing device configured to form a third ~~halftone~~ color plane, indicating whether a first colorant and a second colorant will be placed on ones of a plurality of pixels, a fourth ~~halftone~~ color plane, indicating whether neither of the first colorant or the second colorant will be placed on the ones of the plurality of pixels, and a fifth ~~halftone~~ color plane, indicating whether one of the first colorant and the second colorant will be placed on the ones of the plurality of pixels, from a first ~~halftone~~ color plane and a second ~~halftone~~ color plane and configured to perform ~~a~~ the compression on the third ~~halftone~~ color plane, the fourth ~~halftone~~ color plane, and the fifth ~~halftone~~ color plane to generate compressed ~~halftone~~ data and to decompress the compressed ~~halftone~~ data to generate decompressed ~~halftone~~ data; and

a memory configured to store the compressed and the decompressed ~~halftone~~ data.

12. (currently amended) The apparatus as recited in claim 11, wherein:

the first ~~halftone~~ color plane corresponds to a cyan ~~halftone~~ color plane; and

the second ~~halftone~~ color plane corresponds to a magenta ~~halftone~~ color plane.

13. canceled

14. (currently amended) The apparatus as recited in claim ~~13~~ 11, wherein:
the compression includes run length encoding.

15. (currently amended) The apparatus as recited in claim 14, wherein:
the processing device includes a processor configured to execute a first set of instructions to form the third, the fourth, and the fifth ~~halftone~~ color plane from the cyan ~~halftone~~ color plane and the magenta ~~halftone~~ color plane and configured to execute a second set of instructions to perform the run length encoding.

16. (currently amended) The apparatus as recited in claim 14, wherein:
the processing device includes an ASIC configured to form the third, the fourth, and the fifth ~~halftone~~ color plane from the cyan ~~halftone~~ color plane and the magenta ~~halftone~~ color plane and configured to perform the run length encoding.

17. (currently amended) An imaging device, comprising:
a processing device configured to form a third halftone color plane, indicating whether a first colorant and a second colorant will be placed on ones of a plurality of pixels, a fourth halftone color plane, indicating whether neither of the first colorant or the second colorant will be placed on the ones of the plurality of pixels, and a fifth halftone color plane, indicating whether one of the first colorant and the second colorant will be placed on the ones of the plurality of pixels, from a first halftone color plane and a second halftone color plane and configured to perform a compression on the third halftone color plane, the fourth halftone color plane, and the fifth halftone color plane to generate compressed halftone data and to decompress the compressed halftone data to generate decompressed halftone data;
a memory configured to store the compressed and the decompressed halftone data; and

an imaging mechanism configured to place colorant on media according to the decompressed halftone data.

18. (original) The imaging device as recited in claim 17, wherein:

the first halftone color plane corresponds to a cyan halftone color plane; and

the second halftone color plane corresponds to a magenta halftone color plane.

19. canceled

20. (currently amended) The imaging device as recited in claim ~~19~~ 18, wherein:

the processing device includes a configuration to form the third, the fourth, and the fifth halftone color plane by determining if a plurality of cyan halftone data values, included within the cyan halftone color plane, indicate placement of ~~the~~ cyan colorant ~~onto a corresponding~~ on the ones of the plurality of pixels;

by determining if a plurality of magenta halftone data values, included within the magenta halftone color plane, indicate placement of ~~the~~ magenta colorant ~~onto~~ on the ones of plurality of pixels;

by setting a plurality of elements in a first array, corresponding to the third halftone color plane, to a first value for those of ~~placement of the cyan and the magenta colorant onto~~ the ones of the plurality of pixels designated for placement of the cyan colorant and the magenta colorant;

by setting the plurality of elements in the first array to a second value for those of ~~placement of fewer than the cyan and the magenta colorant onto~~ the ones of the plurality of pixels designated for placement of fewer than the cyan colorant and the magenta colorant;

by setting a plurality of elements in a second array, corresponding to the fourth halftone color plane, to the first value for those of ~~placement of neither the cyan or the magenta colorant onto~~ the ones of the plurality of pixels designated for placement of neither the cyan colorant or the magenta colorant;

by setting the plurality of elements in the second array to the second value for those of ~~placement of either the cyan or the magenta colorant onto~~ the ones of the plurality of pixels designated for placement of either the cyan colorant or the magenta colorant;

by setting a plurality of elements in a third array, corresponding to the fifth halftone color plane, to the first value for those of ~~placement of only the cyan colorant onto~~ the ones of the plurality of pixels designated for placement of the cyan colorant without placement of the magenta colorant; and

by setting the plurality of elements in the third array to the second value for those of ~~placement of only the magenta colorant onto~~ the ones of the plurality of pixels designated for placement of the magenta colorant without placement of the cyan colorant.

21. (original) An inkjet printer, comprising:

a processor configured to form a blue halftone color plane, a white halftone color plane, and a cyan-magenta halftone color plane from a cyan halftone color plane and a magenta halftone color plane and configured to perform a run length encoding of the blue, white, and cyan-magenta color plane to generate compressed halftone data and to decompress the compressed halftone data to generate decompressed halftone data;

a memory configured to store the compressed and the decompressed halftone data; and

an imaging mechanism configured to place cyan ink and magenta ink onto media according to the decompressed halftone data.

22. (original) The inkjet printer as recited in claim 21, wherein:

the processor includes a configuration to form the blue, the white, and the cyan-magenta color plane by determining if a plurality of cyan halftone data values, included within the cyan halftone color plane, indicate placement of the cyan colorant onto a plurality of pixels corresponding to the cyan halftone data values;

by determining if a plurality of magenta halftone data values, included within the magenta halftone color plane, indicate placement of the magenta colorant onto the plurality of pixels corresponding to the magenta halftone values;

by setting a plurality of elements in a first array, corresponding to the blue halftone color plane, to a first value for placement of the cyan and the magenta colorant onto ones of the plurality of pixels;

by setting the plurality of elements in the first array to a second value for placement of fewer than the cyan and the magenta colorant onto ones of the plurality of pixels;

by setting a plurality of elements in a second array, corresponding to the white halftone color plane, to the first value for placement of neither the cyan or the magenta colorant onto ones of the plurality of pixels;

by setting the plurality of elements in the second array to the second value for placement of either the cyan or the magenta colorant onto ones of the plurality of pixels;

by setting a plurality of elements in a third array, corresponding to the cyan-magenta halftone color plane, to the first value for placement of only the cyan colorant onto ones of plurality of pixels; and

by setting the plurality of elements in the third array to the second value for placement of only the magenta colorant onto ones of the plurality of pixels.

23. (currently amended) A storage device to store instructions to perform a compression, comprising:

a computer readable medium; and

processor executable instructions stored on the computer readable medium, with the processor executable instructions configured to form a third halftone color plane a fourth halftone color plane and a fifth halftone color plane from a first halftone color plane and a second halftone color plane and configured to perform a the compression on the third halftone color plane, the fourth halftone color plane, and the fifth halftone color plane.

24. (original) The storage device as recited in claim 23, wherein:

the first halftone color plane includes a cyan halftone color plane, the second halftone color plane includes a magenta halftone color plane,
the third halftone color plane includes pixels for placement of cyan colorant and magenta colorant, the fourth halftone color plane includes pixels for which no colorant will be placed, and the fifth halftone color plane includes pixels for placement of either the cyan colorant or the magenta colorant.

25. (original) The storage device as recited in claim 24, wherein:
the compression includes run length encoding.

26. (currently amended) A method for determining values in arrays used in compression, comprising:
determining if a first halftone data value indicates placement of a first colorant onto a pixel;
determining if a second halftone data value indicates placement of a second colorant onto the pixel;
setting an element in a first array to a first value for placement of the first and the second colorant onto the pixel;
setting the element in the first array to a second value for placement of fewer than the first and the second colorant onto the pixel;
setting an element in a second array to the first value for placement of neither the first or the second colorant onto the pixel;
setting the element in the second array to the second value for placement of either the first or the second colorant onto the pixel;
setting an element in a third array to the first value for placement of only the first colorant onto the pixel; and
setting the element in the third array to the second value for placement of only the second colorant onto the pixel.

27. (original) The method as recited in claim 26, further comprising:

repeating determining the placement of the first and the second colorant and setting the element in the first, second, and third array for a plurality of pixels forming an image.

28. (original) The method as recited in claim 27, further comprising:

run length encoding the first array, the second array, and the third array.

29. (original) The method as recited in claim 27, wherein:

the first colorant corresponds to cyan; and

the second colorant corresponds to magenta.

30. (currently amended) A method for determining values in arrays used in compression, comprising:

setting a first halftone array element and a second halftone array element to a first value if a first array element equals a third value;

setting the first halftone array element and the second halftone array element to a second value if a second array element equals the third value;

setting the first halftone array element to the first value and the second halftone array element to the second value if a third array element equals the third value; and

setting the first halftone array element to the second value and the second halftone array element to the first value if the third array element equals a fourth value.

31. (original) The method as recited in claim 30, wherein:

a cyan color plane includes the first halftone array element;

a magenta color plane includes the second halftone array element.

32. (original) The method as recited in claim 31, wherein:

a blue color plane includes the first array element;

a white color plane includes the second array element; and

a cyan or magenta color plane includes the third array element.

33. (original) The method as recited in claim 32, further comprising:

decompressing a run length encoded blue color plane to generate the blue color plane;

decompressing a run length encoded white color plane to generate the white color plane; and

decompressing a run length encoded cyan or magenta color plane to generate the cyan or magenta color plane.

34. (original) The method as recited in claim 33, wherein:

the first value and the third value correspond to a logic one; and

the second value and the fourth value correspond to a logic zero.